

animals sunk in tragic collapse at the feet of a statue of the goddess, amid the rocks of a desolate scene, is a mere welter of forms, with nothing in it of imaginative fire or sensuous beauty to divert attention from the artist's technical weakness. In short, the pleasantest thing for the observer to do is to revert to the quartette of men who in one way or another redeem the credit of a school in which, paradoxically, they are really aliens.

The first of living Spanish artists, Francisco Pradilla, sends nothing to Paris. The absence of his support tells heavily. Alike in his brilliant historical canvases and in his small studies of Italian peasant life, this painter joins originality and charm to great technical faculties. Villegas is another absentee, and one not easily spared. It is a pity that he and Pradilla did not consult together at Rome, where they both have lived for many years, and send each some characteristic piece, if it were only a small study, to form part of the national collection here. Few of those who sustain the burden of the occasion

HUGH JOHN MACDONALD.

PREMIER OF MANITOBA ACTIVE IN THE CANADIAN POLITICAL CAMPAIGN.

Montreal, Sept. 29.—The most interesting feature of the present political campaign in Canada, which is being carried on preparatory to a general election, is the prominence given in it by the Conservatives to the Hon. Hugh John Macdonald, Premier of Manitoba. It is true that this is not the first general election in which he has been prominent, for in 1896, when the Tupper Government appealed to the people and met with a crushing defeat, he was Minister of the Interior, and as such was much in evidence on the platform. In those days, however, his name was not mentioned for the leadership of the party, and no marked interest was aroused in him. The events of the last four years have, however, convinced the Conservatives that they badly need a new

reputation of being one of the best—if not the best—platform speakers in Canada.

Mr. Macdonald is married, and has one son who bears his grandfather's famous name—John Alexander Macdonald.

LIGHTNING RODS ON ST. PAUL'S.

From The London Daily News.

A total rearrangement of the system of lightning conductors on St. Paul's Cathedral is now virtually complete. It is interesting to learn from Killingworth Hedges, M. I. E. E., the electrician under whose superintendence the work has been carried out, that the old idea that the erection of a lightning rod on the highest point of a structure protected an area all round it is quite illusory. The safeguarded area was supposed to be the space within a circle whose radius was equal to the height of the lightning rod. This theory, we understand, is now discredited, and the Cathedral has been protected by a system of conductors, perpendicular and horizontal, comprising over a mile of cables, on which at various prominent points are placed about fifty "aigrettes"—groups of solid copper spikes radiating upward, and electrically connected at the base with the cables.

HUGE GRANITE COLUMNS.

SHAPED AND POLISHED IN A LATHE.

TO ADORN THE EPISCOPAL CATHEDRAL IN THIS CITY—THE BIGGEST MACHINE OF ITS KIND IN THE WORLD.

For the Cathedral of St. John the Divine, in this city, thirty-two magnificent granite columns are to be supplied, each as high as a four story house, and to shape them a remarkable piece of machinery has recently been constructed in Philadelphia and sent to the quarries of the Bodwell Granite Company, in Vinalhaven, Me. It is nothing less than a turning lathe of unparalleled strength and proportions.

A good illustration of the objects and operation of a lathe is found in a shop where wooden balusters are manufactured. A stick of wood, three or four inches square and two or three feet long, is adjusted in a horizontal position, with its ends firmly held by metal disks, which are intended to revolve rapidly. The stick being thus set in rotation, a workman applies to it the edge of a chisel, or other cutting tool, which rests on a fixed support, but may be shifted from one end of the stick to the other. The result of this treatment is to make the stick perfectly round in a very short time. Its diameter at different points may be varied, if this is desirable, so that in one place there is a graceful bulge and in another a slender taper. Lathes are also built for working metal, and the cutter is usually shifted automatically by a screw motion, so that the lack of uniformity which results from hand work is eliminated, and absolute adherence to a model insured.

The same method is now employed in shaping long blocks of stone into columns like those in front of the New-York Life Building in Broadway. The stone is suspended horizontally between the "head stock" and "tail stock," both of which can rotate. As in other lathes, the power which causes the stone to revolve is applied to the head stock. By arranging suitable cutting tools on the side the superfluous material is chipped off by degrees, and the column is reduced to the desired dimensions as surely, though, of course, not so rapidly, as a wooden baluster.

The finished columns of the Episcopal Cathedral are to be 54 feet long, and have a diameter of 6 feet. When finished, each will weigh 160 tons. But to begin with, a block is quarried out that is 67 feet long, measures 8½ by 7 feet in cross section, and weighs about 310 tons! This burden must be sustained by the two rotating ends of the marvellous machine recently sent to Vinalhaven. Before the lathe is put in operation it is intended that a little of each rectangular edge shall be taken off from the block by hand. Eight cutting tools will be adjusted close to each other, one going a little deeper than its predecessor. Each is designed to cut off three inches of stone, so that together they would be capable of making a cut twenty-four inches in depth. By a suitable mechanism these cutters are slowly shifted from one end of the lathe to the other, so as to traverse the whole length of the column. But they are set in such a manner that they cannot make the diameter less than six feet.

When a column has thus been brought down to the proper size it still has a rather rough surface. The stone must now be polished. This second operation is conducted with the lathe also, but the rotation is effected at a somewhat higher rate of speed. There are two polishing processes. The first, or "rough" polishing, is done with a cup shaped device that has a lot of hardened steel shot in contact with the moving surface. In the final operation sand and emery are employed. A period of about six weeks is required for each column. It will take nearly four years, therefore, to get out the whole thirty-two columns.

This machine is 86 feet long and weighs 135 tons. It is much larger than any other stone cutting lathe ever before constructed. It is driven by a fifty horse-power engine. When engaged in cutting its speed is one and three-quarters revolutions a minute, and three when used for polishing. The change of speed is effected by gearing. The work of constructing the lathe was begun in December last, and it was delivered to the Bodwell Granite Company in May. But it was not put into operation until a few weeks ago.

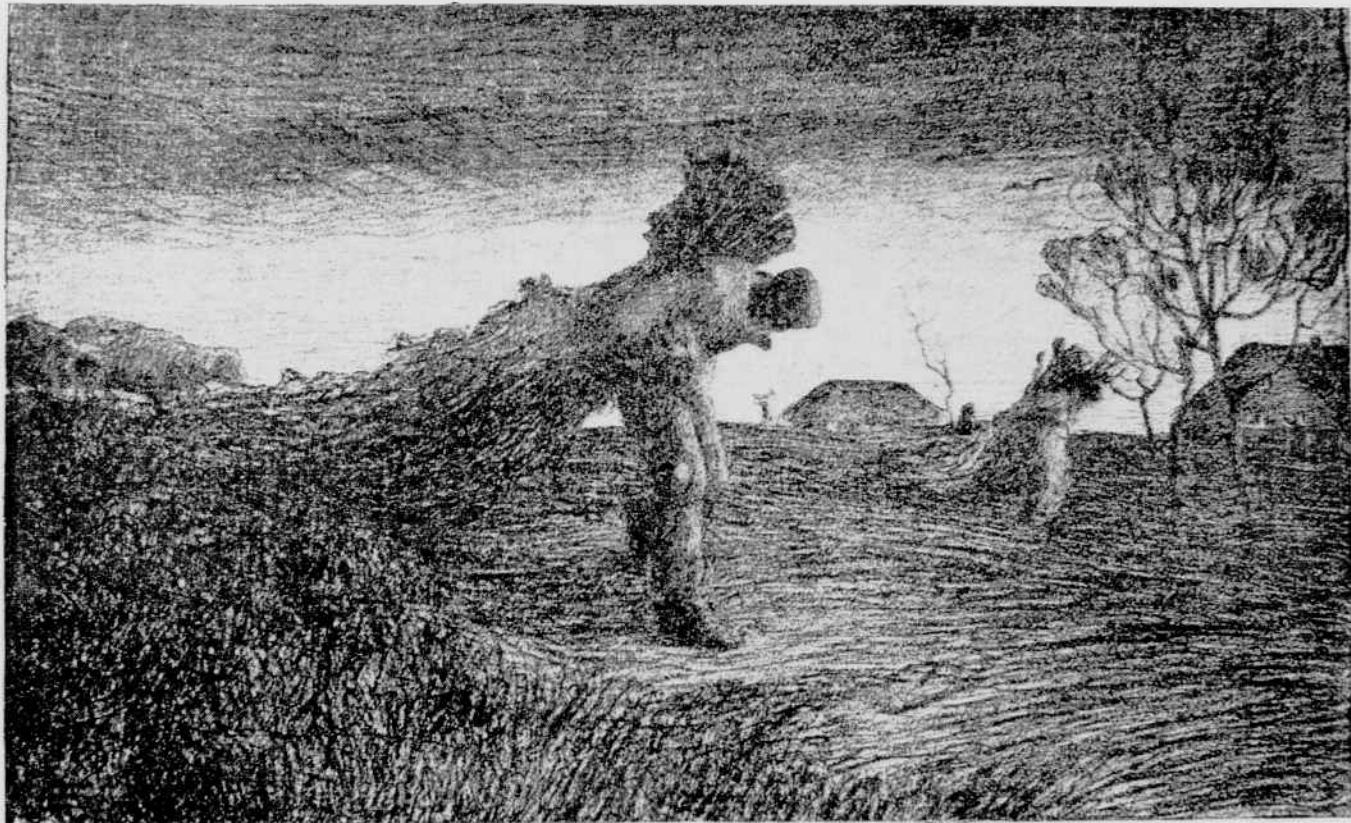
A DAYLIGHT METEOR.

From Nature.

Just before sunset on September 2 a magnificent meteor was observed in the North of England and in Scotland. A large number of descriptions of the object have appeared in the newspapers, and it appears that notwithstanding broad daylight the spectacle was a very brilliant one.

At St. Anne's, Lancashire, the meteor fell in a northerly direction, and left a column of white smoke, which remained visible ten minutes. At Hunt's Cross the time was noted as 6h. 52m., and the object is said to have fallen near Halewood, leaving a long trail of white dust for several minutes. As seen from Birkenhead the meteor appeared at 6h. 54m. in the northeast, and looked like a descending rocket. Its path was nearly vertical, and it left a "dust trail" for nearly six minutes. At Wetherby, Yorks, the smokelike cloud left by the nucleus remained visible until 7h. 30m. At Overton, Ellesmere, the object is said to have apparently fallen on a field on the left bank of the Dee, about a mile from Bangor Iscoed.

At and near Edinburgh the fireball was witnessed by many persons. One observer says that at 6h. 55m. there was a sudden flash and what appeared to be a streak of molten silver followed by a train of sparks whizzed past, apparently falling into a large field of turnips on his right hand.



"DERNIER EFFORT."

(From the drawing by Segantini.)

are fit substitutes for the two. The strictly national works are apt to be gaudy commonplaces or cruel horrors, the latter including one picture painted (the size of life) by Fernando Cabrera, and representing a morgue, with all its awful facts set forth in brutal candor. Madrazo's portraits of women are facile, elegant, but purely Parisian in character, the sort of work that is constantly met in the Salon. Antonio Fabres belongs in the same category. His method is snappy, he is amusing—after a fashion—but his work is altogether French, and not above the conventional plane. Francisco Domingo is a kind of Spanish Meissonier, less exquisitely polished, but none the less interesting for that fact. "Un Savant," by this painter, a pleasing portrait, has delightful breadth. With him the outlook improves, though the window through which he glances does open on France rather than on Spain. Moreno Carbonero's two scenes from "Don Quixote" are admirably sympathetic and spirited. One of them particularly, in which the gentle knight is coming to close quarters with the windmill, is so good that it is hard to think amiably of the Hanging Committee responsible for its having been wretchedly hung. Daniel Vierge, the noted illustrator, provides a pleasant spot in the show, even though he exhibits but a handful of fugitive odds and ends from his sketch book and portfolios.

The one Spaniard who comes aggressively and finely to the front is a comparatively young man, Joaquin Sorolla. He is a realistic painter of sailmakers at work, of nurses giving children dips in the sea, of Spanish peasants lounging. He paints his simple personages in the simplest fashion, and pours sunlight over them until his canvases threaten to make you blink. There is nothing delicate, nothing gracious in his art. The nearest he comes to the rendering of a beautiful line is in "Le Bain," a picture captivating in its breezy and yet very graceful treatment of flapping sheets and swelling sails. For the most part, however, Sorolla is anxious to set down nothing more than the facts as he sees them out of doors, to paint figures with life in them, stirring winds, hot sunshine, and the vivid play of light and shade everywhere. A crude passage here and there is powerless to lessen the vitality and sparkle of his work. He is by all odds the most interesting figure in the Spanish section, and since that is not the best of compliments, the Spanish section being generally dull and tasteless, it may be added that he is also one of the most promising young painters to be found in all the Grand Palais. R. C.

DEFINED.

From The Chicago Post.

"Papa, what is 'filthy lucre'?"
"It is the money that another man has."

leader, and they have turned instinctively to the son of their former chief, who for forty years dominated the politics of Canada.

The name of Macdonald is still one to conjure with, and, still more happily for the Conservatives, the characteristic lineaments of the father have been renewed in the son, while Hugh John has much of the geniality, suavity and tactfulness which made Sir John A. Macdonald the most likable personality of his generation. Accordingly, he has been called from the narrow political field of Manitoba and has been promoted almost to a position of co-ordinate leadership with Sir Charles Tupper. The campaign buttons and lithographs bear the faces of both men side by side, and there are constant references to the "Tupper-Macdonald" campaign.

Hugh John Macdonald is the only son of the late Sir John Macdonald, Prime Minister of the Dominion of Canada from the confederation until his death, in 1891, with the exception of one Parliament. He was born in Kingston in 1850, and was educated for the bar. After practising for some years he went west to Winnipeg, where he became head of a leading law firm, two of his partners being sons of Sir Charles Tupper. He took absolutely no interest or part in politics until he was over forty years of age. In addition to his profession, he was interested in military matters, and twice took the field as an officer—in 1870 in the suppression of the Red River Rebellion, and again in 1885, in the Northwest Rebellion campaign. Last year he declined a commission in the Canadian regiment that went to the Transvaal.

In the general elections of 1891 the Conservatives of Winnipeg were at their wits' end to secure a candidate to pit against a strong Liberal who was in the field, and by a lucky inspiration they picked upon Hugh John Macdonald. He surprised both friends and foes by his skill as a campaigner, and won easily. In Parliament he made no attempt to advance his political fortunes, and two years afterward resigned his seat on the ground that his private business required his attention.

His future will be determined largely by the result of the coming election. In the event of Sir Charles Tupper regaining the Premiership, Mr. Macdonald will become a member of his Cabinet, with an implied claim on the leadership when it falls in through the death or retirement of Sir Charles, who is now in his eightieth year. In the more probable event of the Laurier government winning the elections Sir Charles will retire forthwith, and the Conservatives will have to select a leader at once. In this contingency it is probable that the choice will fall on Mr. Foster, who has a record of nearly twenty years of brilliant service in Parliament to his credit, as well as the well earned

The old system of joint making by "junction pieces," or splicing and soldering, has also been abandoned, it having been found that if surfaces were merely screwed together they were apt to oxidize and set up resistance, and if they were soldered the soldering sooner or later would be very likely to become loosened and detached by the natural expansion and contraction of the metals.

A new method of running to earth has also been adopted. The usual plan is to connect the conductors with plates of copper embedded deep down in moist earth, and these plates, to be effective, must be of considerable size. It is often difficult to get them down low enough. At St. Paul's Cathedral they have made earth con-



HON. HUGH JOHN MACDONALD,
Premier of Manitoba.

nection by means of iron pipes perforated at the bottom and driven into the ground by special tackle, thus affording a passage down which the conductor is passed to the necessary depth, and by means of which, if necessary, the earth below may be watered. The whole work has been carried out by the Cathedral Surveyor's staff under the personal superintendence of the electrician.

A CONVERSATION BARRED OUT.

From The Rochester Post-Express.

At a term of the Circuit Court in one of the upriver counties not long ago a horse case was on trial, and a well known horseman was called as a witness. "Well, sir, you saw this horse?" said the defendant's counsel. "Yes, sir, I!" "What did you do?" "I jest opened his mouth to find out how old he was, an' I says to him, says I, 'Old feller, I guess you're pretty good yet.'" "Stop!" cried the opposing counsel. "Your Honor, I object to any conversation carried on between the witness and the horse when the plaintiff was not present." The objection was sustained.